
Inserting Sets of Data

A brief Introduction

INSERT Statement

INSERT statements are used to add rows into tables.

There are two ways of executing this query(Values and Select) and the syntax for each will be outlined in subsequent slides.

Be mindful of auto-incrementing columns that do not want you to insert a value. Often ID columns are auto-incremented and therefore do not need to be explicitly inserted.

Insert Values syntax

Example Below: adds a row to the table

```
INSERT INTO Customers  
(CustomerID, CustFirstName, CustLastName,  
CustStreetAddress, CustCity, CustState, CustZipCode,  
CustPhoneNumber)  
VALUES  
(10001, 'Martha', 'Washington', '101 Great Pine Way',  
'Jersey', 'OH', '98102', '555-1234');
```

*All columns with the **exception of auto-incrementing columns** as are often seen with ID fields.

To the right, you'll see that since we are using all of the insertable columns in a table, listing each column name is unnecessary. **It is good practice, however, to explicitly list the columns for clarity.**

Values syntax when adding values to all columns*

INSERT INTO Customers
VALUES

('Martha', 'Washington', '101 Great Pine Way', 'Jersey', 'OH', '98102', '555-1234');

SQL Dialects: INSERT vs INSERT INTO

In Microsoft's T-SQL (SQL dialect / variant used in Microsoft SQL Server), as well as many other SQL Servers, you can omit the word "INTO." For example, you might see

```
INSERT Customers (CustFirstName, CustLastName,  
CustStreetAddress, CustCity, CustState, CustZipCode,  
CustPhoneNumber) VALUES ('Martha', 'Washington', '101  
Great Pine Way', 'Jersey', 'OH', '98102', '555-1234');
```

In these dialects, this is the same as **INSERT INTO**.

****Note** this is very good way to 'copy and paste' data from one location to another. There will instances where you need to employ this in the Try It section.

Select syntax

```
INSERT INTO Engagements_Archive  
SELECT Engagements.*  
FROM Engagements  
WHERE Engagements.EndDate  
<'2013-01-01'
```

Try It-1 Sales Order

Create a new customer record for Mary Baker at 7834 W. 32nd Ct. Bothell, WA 98011 with area code 425 and ph number 555-9876

Try It-2 Entertainment db

Add 'New Age' to list of musical styles

Try It-3 School Scheduling db

Angel Kennedy wants to register as a new student. His husband, John is already enrolled. Create a new student record for Angel using the information from John's record.

Try It-4 School Scheduling db

Staff member Tim Smith wants to enroll as a student. Create a new student record from his staff record.

Try It-5 Research

Read up on stored values in SQL
